

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A gateway apparatus connected to at least one appliance through a first network, comprising:

an appliance control panel information inputting means for acquiring unit which is adapted to acquire appliance control panel information indicating panel parts of the appliance on a display screen and an operational range of the panel parts;

a gateway apparatus information memorizing means for memorizing unit which is adapted to memorize gateway apparatus information indicative of whether or not a control instruction command input from one of a plurality of control devices through either one of the a first network and/or a second network, to the appliance will be is-allowed to be accepted; and

an appliance control command producing means for determining unit which is adapted to determine, with reference to the gateway apparatus information, whether or not the a control instruction command input from one of the control devices is-possible can be accepted in cases where the control instruction command input has been received through either one of the first and/or second networks, and for producing a control command toward the appliance on the basis of the appliance panel information in cases where it is determined that the control instruction command input is-possible to can be accepted, wherein the appliance is adapted to be operated in response to the control command,

wherein the gateway apparatus further comprises appliance operation status inputting unit which is adapted to preserve appliance operation status information, including priority control device ID information and an operation table that comprises a current operation status of the appliance, an operable operation at all statuses that the appliance can take, and an indication of what the status will be after the operation is performed,

wherein the control device comprises a first control device that is adapted to output a control instruction indicating a series of operations, and

wherein the appliance control command producing unit determines, with reference to the gateway apparatus information and the appliance operation status information, whether or not it is possible for the apparatus to accept the received control instruction, records the control device ID of the first control device as the priority control device ID information of the appliance

operation status information when the appliance at a current status requires the appliance control command producing unit to accept in preference the control instruction of the first control device indicating the series of operations, accept in preference the control instruction sent from the first control device on the basis of both a control device ID of each of one or more control devices including the first control device and the priority control device ID information when control instructions sent from the control devices are received, and determines whether to produce a control command that is valid for the desired series of operations, wherein the appliance is adapted to preferably perform the series of operations in response to the control command.

2. (Currently Amended) The gateway apparatus according to claim 1, wherein the gateway apparatus information memorizing ~~means~~ unit is configured into ~~means for memorizing a unit that is adapted to memorize~~ the gateway apparatus information indicative of whether or not it is possible for the control instruction command input from the second network to the appliance ~~is possible~~ to be accepted, and

the appliance control command producing ~~means~~ unit is configured into ~~means for determining a unit that determines~~, with reference to the gateway apparatus information, whether or not the control instruction command input ~~is possible to can~~ be accepted in cases where the control instruction command input has been received through the second network, and for producing the control command ~~toward~~ for the appliance on the basis of the appliance panel information in cases where it is determined that it is possible for the control instruction command input ~~is possible~~ to be accepted.

3. (Currently Amended) The gateway apparatus according to claim 1, wherein the appliance control command producing ~~means~~ unit is configured into ~~means for determining a unit that determines~~, with reference to the gateway apparatus information, whether or not it is possible for the control instruction command input ~~is possible~~ to be accepted in cases where the control instruction command input has been received without being routed through both of the first and second networks, and for producing the control command ~~of toward~~ of the appliance on the basis of the appliance panel information in cases where it is determined that it is possible for the control instruction command input ~~is possible~~ to be accepted.

4. (Currently Amended) The gateway apparatus according to claim 1, wherein the control command ~~input~~ to the appliance through the first network is ~~an input~~ produced from a control instruction sent from a remote control to control the appliance.

5. (Currently Amended) The gateway apparatus according to claim 1, wherein the control command ~~input~~ to the appliance through the first network is ~~an input~~ produced from a control instruction sent from the appliance of which having a front panel that has been operated.

6. (Currently Amended) The gateway apparatus according to claim 1, further comprising a command outputting means for outputting unit that outputs the control command produced by the appliance control command producing ~~means~~ unit.

7. (Currently Amended) The gateway apparatus according to claim 6, wherein the command outputting ~~means~~ unit is configured to transmit the control command to the appliance through the first network or to display the control command on an appliance directly connected to the gateway apparatus.

8. (Currently Amended) The gateway apparatus according to claim 1, further comprising an appliance panel information updating means for updating unit that is adapted to update the appliance panel information in accordance with changes in a panel state of the appliance that can be viewed on the panel.

9. (Currently Amended) The gateway apparatus according to claim 8, wherein the appliance panel information updating ~~means~~ unit is configured to update the appliance panel information in response to reception of a notification ~~indicative of that will indicate~~ a changes in the panel state of the panel of the appliance.

10. (Currently Amended) The gateway apparatus according to claim 8, wherein the appliance panel information updating ~~means~~ unit is ~~configured~~ adapted to acquire the panel state of the panel of the appliance and to update the appliance panel information.

11. (Currently Amended) The gateway apparatus according to claim 1, further comprising a gateway service list producing means for providing unit that is adapted to provide a remote control device with gateway service list information produced based on the appliance panel information, wherein the gateway service list information being is adapted to be requested by the remote control device via the second network.

12. (Currently Amended) The gateway apparatus according to claim 11, wherein ~~the gateway service list producing means is configured to produce the gateway service list information based on the appliance panel information~~ is adapted to have been memorized by the appliance panel information inputting means unit, in response to the request from the remote control device.

13. (Currently Amended) The gateway apparatus according to claim 11, wherein the gateway service list producing ~~means unit~~ is adapted to be configured to ~~previously~~ produce and store the gateway service list information based on the appliance panel information that has been memorized by the appliance panel information inputting ~~means unit~~, and to provide the stored gateway service list information, in response to the request from the remote control device.

14. (Currently Amended) The gateway apparatus according to claim 11, wherein the gateway service list producing ~~means unit~~ is configured to provide browser-displaying data as the gateway service list information, the browser-displaying data being according to a type of a set of tags supporting a browser installed in the remote control device.

15. (Currently Amended) The gateway apparatus according to claim 11, wherein the gateway service list producing ~~means unit~~ is configured to provide a program as the gateway service list information, the program being according to a type of a virtual machine (VM) supported by a browser installed in the remote control device.

Claims 16 and 17 are cancelled.

18. (Currently Amended) The gateway apparatus according to claim ~~16~~ 15, comprising a command memorizing means unit, in cases where the appliance has a status that exclusively permits acceptance of an operation on a button at a certain control device, for memorizing commands produced by the appliance control command producing means unit and for transmitting to the appliance the memorized commands at in a memorized order, provided the status is updated so as not to require ~~the~~ exclusive acceptance.

19. (Currently Amended) The gateway apparatus according to claim 1, comprising a use key information inputting ~~means for preserving unit which is adapted to preserve~~ use key information indicative of a condition needed to useably connect to make the appliance connected to the first network ~~usable~~, wherein the appliance control command producing means unit includes ~~means for determining a unit that is adapted to determine~~ whether or not it is possible to accept the input control instruction in consideration of depending on the use key information.

20. (Currently Amended) The gateway apparatus according to claim 19, wherein the use key information includes at least one of: accepted time zone data of the input control instruction, location identification data, terminal identification data, and user identification data.

21. (Currently Amended) The gateway apparatus according to claim 19, wherein the use key information corresponds to each state of the appliance operation status information, and the appliance control command producing means unit is configured to use the use key information corresponding to a current status as the use key information to determine whether or not it is possible to accept the input control instruction.

22. (Currently Amended) The gateway apparatus according to claim 21, wherein the gateway service list producing means unit is configured to produce gateway service list information that is adapted to determine an operational range coming from the remote control device, based on the use key information and the appliance operation status information, and transmit the produced information to the remote control device.

23. (Currently Amended) The gateway apparatus according to claim 1, further comprising a contents managing means for memorizing unit that is adapted to memorize a content list, including contents IDs, preserved by the device connected to the first network and numbers of use keys each corresponding to each contents ID and detecting an access from the appliance to the contents, wherein the appliance control command producing means unit includes means for examining a unit that is adapted to examine a right of use based on the use key in detecting the access and determining whether or not it is possible to access the contents.

24. (Currently Amended) The gateway apparatus according to claim 1, wherein the appliance panel information inputting means unit is configured to preserve, in addition to the appliance panel information, linked appliance information indicating, for each function of the appliance, an objective appliance to be operationally linked, the function, and identification data of a gateway apparatus to be linked, and further comprising;

an input distributing means for unit which, in cases where control instructions command inputs are acquired from the control device or other gateway apparatuses, accepting is adapted to accept only a control instruction command input directed to the gateway apparatus itself and adapted to deliver delivering the remaining control instructions command inputs to the other gateway apparatuses, thereby enabling the performance of a linked operation being performed among a plurality of desired gateway apparatuses.

25. (Currently Amended) The gateway apparatus according to claim 24, wherein the control instructions command inputs include information about distributing conditions, and the input distributing means unit includes means for deciding a unit which decides a situation that each gateway apparatus re-delivers the remaining instructions command inputs to which a particular gateway apparatus.

26. (Currently Amended) The gateway apparatus according to claim 1, connected via both a service server producing credit information and a network so as to be adapted to acquire an input a control instruction from a terminal together with the credit information, comprising an accepting means for memorizing unit that is adapted to memorize acceptance information in which a condition for allowing the input control instruction to be accepted and determining

whether or not it is possible for the input control instruction ~~is possible~~ to be accepted on the basis of the input control instruction and the acceptance information.

27. (Currently Amended) The gateway apparatus according to claim 26, wherein the acceptance information includes the condition specified every request input for acquiring the panel information and every input of the control command control instruction.

28. (Currently Amended) The gateway apparatus according to claim 26, wherein the condition of the acceptance information includes supply of information about certification of settlement issued by the service server, and further comprising means for accepting a unit which accepts only inputs control instructions that have been charged by the service server.

29. (Currently Amended) A remote control system, comprising: in which a gateway apparatus is connected to

an outside network built outside a home;

and to a home network connected to a home appliance; and

a gateway apparatus connected to the outside network and the home network, wherein the home appliance being remote is adapted to be remotely-controlled through the outside network and wherein the remote control is adapted to be mediated by the gateway apparatus, and the remote control being mediated by the gateway apparatus,

wherein the gateway apparatus is configured to output appliance panel information of the home appliance to a control device each of a plurality of control devices to remote-control the home appliance through the outside network such that a figure approximating a front panel of the appliance is displayed on a screen of the control device, to convert receive a control instruction indicating an operation on the panel displayed on the screen of the control device, to convert the control instruction into a control command to the home appliance, and to send the produced control command to the home appliance such that the home appliance performs an operation corresponding to the operation done on the panel displayed by the control device,

wherein the control devices include a first control device which outputs a control instruction indicating a series of operations, and

the gateway apparatus determines whether or not it is possible to accept the received control instruction, records a control device ID of the first control device as priority control device ID information when the appliance at a current status requires the gateway apparatus to accept, in preference, the control instruction of the first control device indicating the series of operations, accept, in preference, the control instruction sent from the first control device on the basis of both a control device ID of each of one or more control devices including the first control device and the priority control device ID information when control instructions sent from the control devices are received, and determines whether to produce a control command that is valid for the series of operations, the appliance performing, in preference, the series of operations in response to the control command.

30. (Currently Amended) The remote control system according to claim 29, wherein a control ~~instruction command~~ for direct control of the home appliance is once inputted to the gateway apparatus, ~~then sent and~~ the gateway apparatus generates the control command from the control instruction and sends the control command to the home appliance.

31. (Previously presented) The remote control system according to claim 29, wherein information about an operated status of the home appliance is sent to the gateway apparatus, wherein the gateway apparatus is configured to hold information about a current operated state of the home appliance.

32. (Currently Amended) The remote control system according to claim 29, wherein the gateway apparatus includes ~~means for determining~~ a unit that is adapted to determine whether the current status of the home appliance is adapted to enable transit to a status commanded by control based on an operation performed on a panel at the control device and ~~means for making~~ a unit that is adapted to make the control command invalid when it is determined that the transition is impossible.

33. (Currently Amended) The remote control system according to claim 29, wherein a use condition to allow the control device to remote-control the home appliance is set, wherein



the gateway apparatus includes ~~means for stop~~ a unit that is adapted to stop the meditation unless the use condition is met.

34. (Previously presented) The remote control system according to claim 33, wherein the use condition is set in association with the status of the home appliance.

35. (Currently Amended) The remote control system according to claim 34, wherein the gateway apparatus includes ~~means for~~ a unit which, according to an operation on a panel at the control device, ~~means providing is adapted to provide~~ the control device with appliance panel information explicitly showing a next operational range of the panel operable by the control device.

36. (Currently Amended) The remote control system according to claim 29, ~~wherein the gateway apparatus consist of~~ comprising a plurality of gateway apparatuses ~~each mediating with the home appliance consisting of~~ and a plurality of home appliances, wherein each gateway apparatus comprises ~~includes means for taking in a unit which receives~~ a control ~~command~~ instruction, directed to the gateway itself, from control ~~commands~~ instructions issued ~~form~~ by the control device to the plurality of home appliances and ~~means for send a unit which sends the~~ taken a control command produced from the received control instruction to a ~~certain~~ specific home appliance ~~to mediate so that~~ whereby the plurality of home appliances are enabled to perform a linked operation.

37. (Currently Amended) The remote control system according to claim 29, wherein the gateway apparatus includes ~~means for allowing a unit which allows~~ the mediation only when the control instruction ~~command input~~ from the control device includes a guarantee given by a service server.

38. (Currently Amended) The remote control system according to claim 29, wherein the gateway apparatus includes ~~means for allowing a unit that is adapted to allow~~ the mediation only when the control instruction ~~command input~~ from the control device includes a certification for settlement of charges, the certification being given by a service server.

39. (Currently Amended) A computer readable program used for a gateway apparatus connected to at least one appliance through a first network, the program providing the computer with the functions of:

acquiring appliance panel information indicating on a display screen panel parts of the appliance and an operational range of the panel parts;

storing into a memory gateway apparatus information indicating whether or not a control instruction ~~command~~ input to the appliance through either one of the first network or a second network is received;

determining whether or not it is possible to accept the ~~input~~ control instruction by making reference to the gateway apparatus information when the control instruction ~~command~~ input to the appliance is received through either one of the first and second networks; and

producing a control command to the appliance based on the appliance panel information when the acceptance is possible.